

Amendments to the Abstract

Please replace the paragraph at page 59, lines 4 through 17, with the following paragraph:

Material condition monitoring may be performed by electromagnetic sensors and sensor arrays mounted to the material surface. The sensors typically have a periodic winding or electrode structure that creates a periodic sensing field when driven by an electrical signal. The sensors can be thin and flexible so that they conform to the surface of the test material. They can also be mounted such that they do not significantly modify the environmental exposure conditions for the test material, such as by creating stand-off gaps between the sensor and material surface or by perforating the sensor substrate.